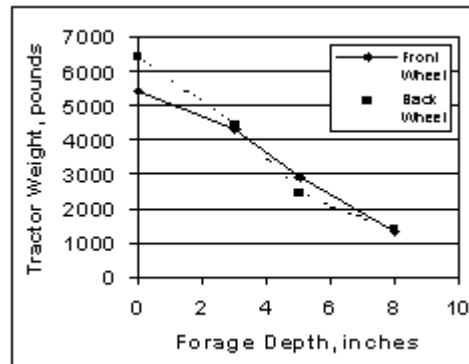


Pack Silage in Thin Layers

Bill Seglar & Bill Mahanna

Packing in thin layers to get silage fully compressed so air is forced out and kept out, heavy tractors are needed. Faster filling rates have forced many to go to larger and/or more packing tractors. An easy way to tell if you are keeping up with packing is to monitor how much new, unpacked forage you have under your wheels at any one time. A Pioneer study conducted in New York indicates that 45 to 60 percent of wheeled tractor weight transferred to forage is lost when more than six inches of forage is packed at a time. Try to get 800 pounds of tractor for each ton per hour coming into the silo. For example, if you are hauling in 50 tons per hour, you should have (50 X 800 =) 40,000s of



tractor(s) working to pack the silage into the bunk. The delivery rate to the bunk from a custom harvest operator may be in the order of 100 to 140 tons an hour. These situations are going to demand at least 80,000 pounds of tractors to pack this silage sufficiently. It's imperative to know your packing capacity to preserve the quality of forage being delivered to the bunker. A 100 horsepower tractor weighs approximately 14,000 lbs. A 4WD is going to range from 30,000 to 40,000 pounds.

Cover and seal horizontal silos to eliminate air perfusion into the surface of the silo. Kansas State University studies show that air can penetrate up to 4 feet into a well-packed bunker, resulting in an increased 33% dry matter loss of the upper four feet. Economic models show that a minimal 4:1 return on investment can be captured by covering bunkers and piles. Tarp and tires is the most common method of covering, although other products are on the market that will prevent oxygen penetration into the silage mass.

Managing bunker faces by shaving rather than digging out with a front-end loader. Tearing at the face with a loader lifts layers of silage and allows air into the crevices. This air stimulates growth of aerobic organisms reducing forage quality. A front-end loader can be used to shave the face, simply moving the vertical edge of the loader along the face of the forage wall.

Utilize Only The Most Researched Inoculant Formulations New formula for water-soluble inoculant products will give *even easier* mixing with water. Growers will see:

- *Easier mixing with water.*
- The *same number of bacteria* per ton of silage. The application rate of bacteria (colony forming units-CFU's) for each inoculant product is based on extensive Pioneer testing, and will continue to be based on that research
- *Bacterial viability even with chlorinated water.* Pioneer has the only water-soluble products with a dechlorinator. This allows the use of chlorinated water to reduce algae growth in tanks.
- *Color coded, crop specific labels.*
- *Convenient squeeze top bottles* to make handling and mixing even more convenient.

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